



PROCEEDINGS
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NEW PHILIPPINE FRUIT BATS

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The collections of the Philippines Zoological Expedition 1946-1947 of Chicago Natural History Museum include two undescribed fruit bats of the genus *Pteropus*. One of these was taken on Busuanga Island from which no fruit bats have been recorded, and the other comes from Paláwan Island, where only *Pteropus v. lanensis* is found. These are described here as

Pteropus leucotis sp. nov.

Type from Singay, Busuanga Island, Calamianes Group, Philippine Islands. No. 63,736 Chicago Natural History Museum. Adult male. Collected March 24, 1947, by D. S. Rabor. Orig. No. 2,647.

Diagnosis.—Closely related to the *samöensis* and *pselaphon* group. Dentition much like that of *Pt. anetianus*; male with well developed neck tufts. Size medium, color pale, with whitish ears.

Color.—Type: General color of mantle Clay Color (Ridgway, 1912) with neck tufts near Hay's Russet. Top of head between ears Deep Olive Buff darkened by black hairs on face between eyes. Back near Hair Brown. Throat Snuff Brown darkening on sides. Hairs of center of belly much darker and mixed with them many silvery-white hairs. Ears light, almost white when held against light.

In three female paratypes the mantle is (1) Cinnamon Buff and top of head Deep Olive Buff, (2) Sayal Brown and top of head Warm Buff. Back Dresden Brown in one, lighter in another and almost white in the third specimen. Under parts Verona Brown, darker in center of belly. Under parts lighter in two other females. Ears in all like those of the type.

Skull.—Typically pteropine, rostrum somewhat shortened. Postorbital processes long, but not quite reaching processes of zygoma. Front of orbit above hinder edge of p^4 . Coronoid process of mandible with front margin steeply ascending, but coronoid height less than length of lower tooth row, c-m₃.

Teeth.—Similar to those of *Pt. anetianus aorensis* but broader, heavier, and with other minor differences. Upper incisors narrow, inner pair longer than outer, narrower than in *aorensis*. Lower incisors unequal, i₂ little more than twice the size of i₁. Upper canines short, not recurved, inner cingulum strong, the raised margin or shelf showing tendency to divide into small tubercles. Lower canines short, slightly recurved, with broad shelf and strong inner cingulum. P¹ absent or very minute. Posterior ledge of p^3 not so sharply divided externally from main cusp nor is the postero-external tubercle so well formed as in *aorensis*. Antero-

internal basal tubercle well developed in p^3 . In p^4 the posterior ledge is not sharply separated externally by a notch from the main cusp but otherwise is very like that tooth in *aorensis*. The posterior ledge in m^1 is little developed, the tooth being $\frac{2}{3}$ as wide as long instead of $\frac{1}{2}$ as wide as long as in *aorensis*. M^2 is larger than m_3 but smaller than p_1 . In the lower jaw p_1 is about twice the size of i_2 . The large basal ledge in p_3 , p_4 , m_1 , m_2 , is marked by a notch postero-externally in the premolars but not so in the molars. This ledge forms a shelf on the interior side of p_4 , m_1 and m_2 . The projecting heel on the antero-internal portion of p_3 is well marked but it does not appear in p_4 . The size of m_3 is greater than that of i_2 .

Measurements of type (paratypes in parenthesis).—Forearm: broken (137-142 mm.); ear 23.8 dry. Skull: greatest length 67.7 (64.9-67.4); condylo-basal length (to front of canine) 60.1 (59.6-60); palatal length 32.9 (32-32.3); interorbital breadth 8.7 (8.5-9); intertemporal breadth 7.5 (6.8-7.1); zygomatic width 38.8 (36.8); mastoid width 22.3 (21.9); width of brain case at zygoma 24.4 (23.5-23.9); orbit to nares 21.8 (19.6-20.3); orbital diameter 14.3 (13.8-14.6); upper tooth row 25.7 (25-26.1); width across canines 13.5 (12.5-12.8); width across m^1 - m^1 19.5 (19.3-20.5); coronoid height of mandible 26.5 (26.2-27); lower tooth row c- m_3 29.2 (28.5). Teeth of type: length and width, p^3 4.7 x 3.6; p^4 5.1 x 3.9; m^1 5.3 x 3.7; m^2 2.5 x 2; p_3 4.8 x 2.9; p_4 5.2 x 3.4; m_1 5.1 x 3.6; m_2 4 x 3.3; m_3 2 x 1.5.

Specimens examined.—Type and three female paratypes.

Remarks.—"In high fruiting *Ficus* tree on mountain side."

Pteropus leucotis obscurus subsp. nov.

Type from Santiago, Iwahig, Paláwan Island, Philippine Islands. No. 63,741 Chicago Natural History Museum. Adult male. Collected May 7, 1947, by B. French. Orig. No. 3,063.

Diagnosis.—Like *Pt. leucotis* but larger and darker. Ears black.

Color.—Mantle Bister (Ridgway, 1912), top of head, general color Hair Brown, lighter between ears; black Fuscous, lighter on sides; throat Bister, darker on sides; center of belly black; neck tufts about color of mantle and not prominent. The one paratype is lighter.

Skull.—Like *leucotis* but larger with heavier teeth.

Measurements.—Forearm, type 142.5, paratype 145.4. Skull of type: greatest length 68.6; condylo-basal length to front of canine 61; palatal length 33.6; interorbital breadth 8.8; intertemporal breadth 7.2; zygomatic width 36.7; mastoid width 20.9; braincase at zygoma 24.3; front of orbit to nares $16.5 \pm$; orbital diameter 13.7; upper tooth row 26.5; width across canines 14; across m^1 - m^1 21.2; coronoid height of mandible 26.2; lower tooth row c- m_3 30.3.

Teeth, length and width: p^3 5.1 x 4; p^4 5.7 x 4.7; m^1 5.9 x 4.5; m^2 2.9 x 2.4; p_3 5.4 x 3.2; p_4 5.6 x 4.3; m_1 5.7 x 4.3; m_2 4.3 x 3.7; m_3 2.2 x 2.1.

Specimens examined.—Type and one paratype. Skull of paratype without number but believed to belong to this specimen.

Remarks.—"Feeding on mango at night."